conformable decoders

Decoders 1.8: Project Realization in Cleanroom

Style: *Teamwork;* Collective

This class is graded P/D/F. To pass, you must: (i) attend all the cleanroom sessions, (ii) work in a team setting, and (iii) finalize your image processing for the image contest, (iv) write a scientific paper/article on the research findings as a team, and (v) demo the final device functionally. By the end of Class #1, students must decide whether to register or drop the course.

Overview: *Decoders 1.8* builds on the combination of knowledge and skills learned in *D1.0* and *D1.7, respectively to* guide students to develop their own mechanically adaptive (i.e., stretchable & flexible) piezoelectric systems. Students will learn how to write an article about their research findings that will be published on the course website by the end of semester. The midterm project is to submit an image of a process and/or a device component with an artistic/personal view. Students show how their personality reflects on projects and more broadly to make potential changes on the society. The images can be edited using any software such as Photoshop to reflect social and emotional vision with the device part. Recognitions are given to all images (e.g., 'The best color') at the Image Contest. The mini videos taken by students throughout the semester result in the final video of the project development.

- Cleanroom (YellowBox) open hours will be held on Tuesdays from 10am-12pm.

Objectives:

1. To work in a team setting and accomplish the task of building a mechanically adaptive device,
2. To use the lens of creativity and social change to produce images of device parts with a social message,
3. To write a scientific paper/article on the research findings as a team,
4. Demo the final device functionally.

Schedule:

Class 1: February 3rd, 2022 (E15-466)

a. Introduction class to discuss problem
    i. Class Engagement: Turkish lunch and discussion/brainstorming session

Class 2: February 10th, 2022 (E15-466)

b. How to write a paper
    i. Class: Explain how to write a paper
    ii. Lab: Start literature review

Class 3: February 17th, 2022 (E15-466 & E15-443a)

c. Design the device

Class 4: February 24th, 2022 (E15-466)

d. Revise the article layout

Class 5: March 3rd, 2022 (E15-466 & E15-443a)

e. Define the roles of individuals & working schedule

Class 6: March 10th, 2022 (E15-443a)

f. Fabricate the device & test

Class 7: March 17th, 2022 (E15-443a)

g. Fabricate the device & test

Class 8: March 31st, 2022 (E15-443a)

h. Fabricate the device & test

Class 9: April 7th, 2022 (E15-466 & E15-443a)

i. Fabricate the device & test
    i. Submit draft images (internally, to the PI)

Class 10: April 14th, 2022 (E15-466 & E15-443a)

j. Imaging project
    i. Class: Evaluate the draft of paper
    ii. Lab: Re-work on images

Class 11: April 21st, 2022 (E15-443a)

k. Fabricate the device & test

Class 12: April 28th, 2022 (E15-443a)

l. Fabricate the device & test

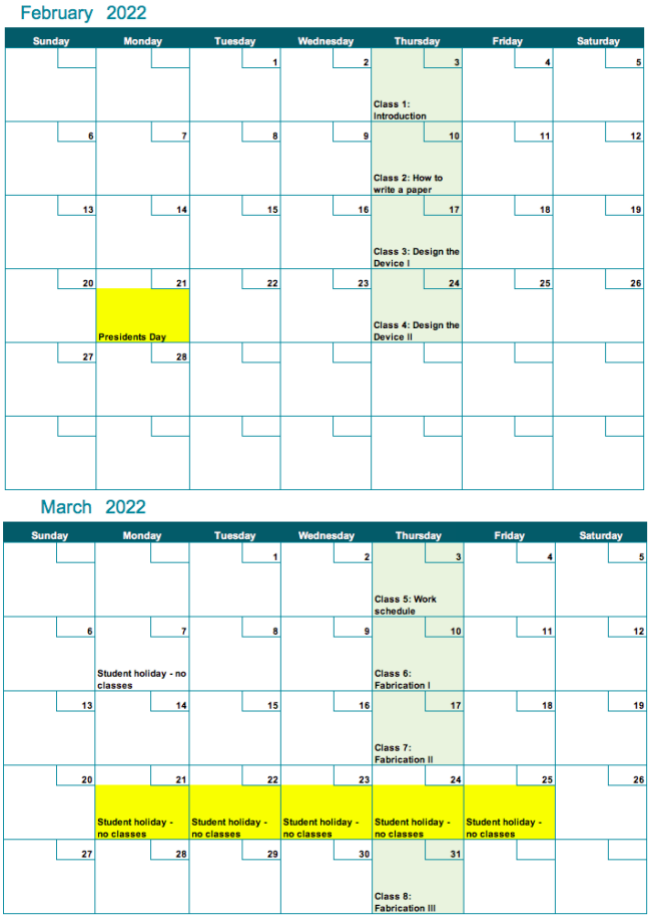
Class 13: May 5th, 2022 (E15-443a)

m. Fabricate the device & test

Class 14: May 12th, 2022 (E15-466)

n. Final deadline to submit article
   i. Class: Evaluate the paper
   ii. Lab: Final image exhibition to ML

Calendar



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April 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7 Class 9: Fabrication IV	8	9
10	11	12	13	14 Class 10: Image Showcase	15	16
17	18 Patriots' Day	19	20	21 Class 11: Fabrication V	22	23
24	25	26	27	28 Class 12: Fabrication VI	29	30

May 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5 Class 13: Fabrication VII	6	7
8	9	10 Last Day of Classes	11	12 Class 14: Article Submission	13	14
15	16	17	18	19	20	21
22	23	24	25	26 Commencement	27	28
29	30 Memorial Day	31				